

Intensifying Reading Instruction for Students With Attention-Deficit/Hyperactivity Disorder: Practices to Support Classroom Instruction and Family–School Collaboration

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Abstract

Many students with attention-deficit/hyperactivity disorder (ADHD) also have reading deficits. These reading deficiencies in students with ADHD are likely to be more severe than those of students with only reading difficulties. To intensify reading instruction to improve reading and behavioral outcomes for students with ADHD, this article describes research-based practices which can be integrated into the classroom reading instruction as well as foster family–school collaboration.

Keywords

reading, behavior, ADHD, intervention, elementary

Many elementary students struggle in reading. According to the 2017 National Center for Education Statistics, 63% of fourth grade students without a disability and 88% of students with a disability are reading below a proficient level (Farland et al., 2017). Of these students with a disability, students with attention-deficit/hyperactivity disorder (ADHD) are particularly vulnerable to reading difficulties. Barkley (2013) refers to ADHD as “. . . a developmental disorder of self-control” (p. 19), which in the classroom can lead to academic difficulties, off-task and disruptive behavior, and poor social skills (Barkley, 2002).

The research is clear that there is a strong connection between early behavior, regulation, and reading performance. Furthermore, difficulties in early behavior and literacy skills tend to co-occur and predict later lower reading performance (Lin et al., 2013; Spira et al., 2005). Therefore, it is not surprising that many students with ADHD also need support in reading, leading to schools often being required to consider interventions which address both reading, and behavioral engagement.

Due to the complex nature of simultaneously remediating reading and behavior outcomes for students with ADHD, this article has two aims. The first aim is to describe several critical adaptations that can be incorporated directly into classroom reading instruction to support both the reading and behavioral outcomes of students with ADHD. The

second aim is to provide supports for families through emphasizing enhanced collaborative communication between the home and school. In both cases, research-based practices will be reviewed with guidance for how they may be integrated into the reading instruction already taking place in the classroom.

Instructional Approaches to Enhance Reading Instruction for Students With ADHD

DuPaul et al. (2012) found that academic approaches for students with ADHD led to greater increases in student academic outcomes than strictly behavioral approaches. In particular, two instructional approaches are reviewed that can advance the success of reading instruction already in place in schools: self-regulation and peer mediation. Both approaches have been found to improve academic and

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behavioral outcomes, can be integrated into an existing reading program, and have been recommended as effective for students with ADHD in multiple reviews (Barkley, 2013; DuPaul et al., 2012; Harlacher et al., 2006).

Self-Regulation

The cycle of goal setting, self-monitoring of goals, and self-reflecting to create better future goals is referred to as self-regulation (Zimmerman, 2002). Interventions that embed self-regulation approaches into instruction have been found to support reading outcomes for students with ADHD across the elementary to high school years and in settings that range from public schools to self-contained private schools (Harris et al., 2005; Johnson et al., 2012; Reid et al., 2005; Roberts, Vaughn, et al., 2019). To teach self-regulation, objective goals are first jointly determined by the teacher and student. Then, the student learns to self-monitor the targeted objective goals, typically using a self-monitoring form to reflect on whether or not the goals were achieved and determine if new goals are required. These processes encourage students to support their own learning. A simplified step-by-step guide to support student self-regulation is provided as well as an example self-monitoring form to support implementation.

Step 1: Creating and teaching goals. Effective reading and behavior goals are explicit in that they are observable and measurable, positively worded to be aligned to expected outcomes, and written in student friendly language (Briesch & Chafouleas, 2009; Lane et al., 2011). For example, Figure 1 provides an example of a self-monitoring form. While “use reading strategies” is included on the form as a goal, the phrase is not an explicit goal as it does not indicate the observable strategies a student would be expected to use. Explicitly described strategic reading behaviors on the form include, “highlight key words in the text,” “write questions in the margins,” and “sound out difficult words.” These goals are observable and measurable since an objective observer could identify if a student is displaying the given strategy. These explicit examples are also positively worded, in that there is a focus on what to do as compared with what *not* to do. Finally, to be sure the goals are fully understood, students should be asked to explain the goal in their own words and teachers can provide appropriate feedback.

When goals are first introduced to students, they may be difficult for students to implement independently. Therefore, students often need support in understanding and implementing their goals. To support students, teachers can begin with teaching students the explicit definitions of each goal as well as provide examples (e.g., “Today I will show you how to write questions in the margins.”). As students move toward independence and students become more

comfortable using their goals, students also can begin to create their own goals, definitions, and examples. Over time, by following this process, teachers and students will have a bank of meaningful goals from which to choose.

Step 2: Self-monitoring. When students self-monitor, they are observing the extent to which they are meeting their goals and recording this information. Self-monitoring forms have been developed to enhance this process by visually displaying progress students are making toward achieving goals. Such templates allow students to more easily self-record their behaviors (Bruhn et al., 2015). In the beginning, to support students in learning how to self-monitor, it is helpful to have designated stopping points, either at predetermined time intervals (e.g., set a timer for every 10 min) or at designated points in the lesson (e.g., after the reading fluency component). These stopping points allow students time to check in with themselves or a teacher to identify the extent to which they are meeting their goals (Harris et al., 2005; McDougall et al., 2017).

A self-monitoring form makes it easier for students to self-evaluate and self-record their points based on the extent to which they are meeting their goals. For example, a student can self-record a “2,” meaning the goal was met, a “1,” meaning the goal was almost met, or a “0,” meaning the goal was not met. These scores can then be totaled to see if the total meets a point goal for the reading class to earn an external reinforcer. For younger students, a smiley face ☺ and a sad face ☹ can replace a number score.

Sometimes, students need support to accurately self-evaluate their behavior. In these cases, reinforcement can be delivered to support student self-evaluation accuracy. For example, a student could earn extra points not only for reaching a goal but also when a teacher agrees with the student’s self-evaluation score (Roberts, Mize, et al., 2019). Reinforcing accuracy is a valuable learning activity, since students learn to be better self-evaluators, and thus, better self-reflectors as well. Figure 1 provides a scaffolded self-monitoring form where students monitor their goals at the halfway point and at the end of the reading lesson. At both points, students could receive contingent reinforcement based on the accuracy of their self-monitoring as well as whether they have met a predetermined goal.

Step 3: Self-reflection. After students monitor their goals, they are taught to self-reflect on their performance and make new goals for the next lesson. Through reflection and revising of future goals, students become more effective and efficient learners (Zimmerman, 2002). Teachers can support student reflection through questioning such as, “What worked well for you?” and “What will you do differently next time?” and think-alouds such as, “I sure had a hard time finding the main idea; next time I think I will summarize what I read after each paragraph.” Figure 1 provides a

Name: _____	Date: _____
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Goals	Student Created Examples
Use Reading Strategies	1. Highlighting key words in text 2. Writing questions in the margins 3. Sounding out difficult words
Be Academically Engaged	1. Raising hand 2. Answering a question 3. Talking about a lesson 4. Reading silently or looking at instructional materials

Goal	Halfway	End of Class
1. I used my reading strategies		
2. I was academically engaged		
Total points		
Tomorrow I will _____		

<u>Self-recording key:</u> 2 = I met my goal, 1 = I almost met my goal, 0 = I didn't meet my goal.

Figure 1. Self-monitoring form example.

prompt to support student reflection with a sentence stem of, “Tomorrow I will ____.” Through reflecting and revising their goals, students can learn to take ownership of their own learning and become more efficient and effective learners. In addition, students can graph their data, based on the number of points they are earning, to monitor progress over time (Johnson et al., 2012; McDougall et al., 2017). When progress is noted, students can be encouraged to think about what is working well and, what, if anything, can be changed or improved. If students are not making progress toward their goal, alternative supports may be needed, such as providing more opportunities for feedback or modeling, changing the goals, or increasing student motivation (Menzies & Lane, 2011).

Peer Mediation

Utilizing other students as instructional supports, known as peer-mediated intervention, has been shown to be effective at improving reading, spelling, student attention, social skills, and academic behaviors for elementary-aged students with ADHD (Cordier et al., 2018; Plumer & Stoner, 2005; Robinson et al., 1981). One-on-one, small group, and whole class peer-mediated arrangements can benefit students with ADHD by increasing on-task behavior, positive social skill interactions, and academic achievement (Kourea et al., 2007; Raggi & Chronis, 2006). In addition, teachers typically perceive value in peer-mediated interventions due to their ease of implementation and efficiency in use (Watts et al., 2019).

For peer-mediated arrangements, it is important for teachers to carefully consider the students they choose to pair or group together. When beginning a peer-mediated intervention, students may need a peer role model who displays consistent appropriate behaviors for desired reading and social-behavioral skills. Educators may consider pairing a student with ADHD with a peer who is a strong model of positive social skills and academic behaviors. When provided with adequate training and expectations, this peer can reinforce positive interactions and on-task behaviors. Furthermore, it is important to teach the student with ADHD how to work within a given peer-mediated reading activity. Table 1 displays the training procedures as well as a list of considerations for teacher implementation. There are multiple arrangements that a teacher may consider when choosing a peer-mediated approach for his or her students with ADHD during reading instruction. This section provides a description of two frequently used models that fall under the umbrella of peer-mediated instruction.

Paired peer tutoring. Peer tutoring has been shown to be effective during reading instruction (as well as during social situations) for students with ADHD and can take the form of same-age tutoring or cross-age tutoring, with an older student providing instruction to a younger student (Cushing & Kennedy, 1997; Robinson et al., 1981; Vilardo et al., 2013). In both cases, there are essential components and steps for training peers and students to function successfully within peer-tutoring roles. First, peer tutors are specifically trained to effectively deliver the instruction. For

Table 1. Components for Training Students for Peer-Mediated Roles.

Components	Steps	Considerations for teachers
Preparation	1. Decide who will conduct training for peer-mediators	Practitioner Paraprofessional Social worker/counselor Other staff member
	2. Choose a location to facilitate training	Noise level Sight lines (distractions) Space for dyads
	3. Prepare and organize for the training session	Instructional materials List of reminders/prompts Practice forms Timers
Teach and implement	4. Introduce: Implementer discusses the rationale, goals, and expectations of peer mediation	Teach peers to recognize and appreciate individual similarities and differences
	5. Model: Implementer models the instructional routine and/or expected learning activities for the peers	Model with one of the peers
	6. Guided practice: Implementer provides opportunities for the student peers to practice the routine	Model and practice with authentic instructional materials
	7. Guided practice: Implementer discusses, teaches, and models reinforcement strategies with the peers	Specific verbal praise statements Nonverbal reinforcement (high-five) Nonverbal cues to support redirection and engagement (finger signal)
Reinforce	8. Independent practice: Students peer role-play all roles within the peer-mediated model	Monitor progress Provide corrective feedback, prompts, or suggestions
	9. Implementer provides explicit positive reinforcement for students displaying skills and strategies taught in the training	Reinforce desired behaviors (verbal praise) at the individual and group level
Review	10. Implementer reviews the skills and expectations covered in the training	Discuss when/where/how the first peer-mediated session will take place in the classroom
	11. Implementer discusses/predicts potential challenges with student peers and problem solves	

example, student tutors need to learn how to effectively and respectfully complete partner reads with feedback, practice new or previously learned vocabulary words, and deliver and/or receive feedback when answering reading comprehension questions.

Next, instruction is provided to both the tutor and tutee on the expectations of the peer-tutoring activity through teacher modeling, individual corrective feedback, and positive reinforcement. Once the tutor and tutee have demonstrated guided mastery implementing the peer-tutoring activity, the tutor and tutee implement the peer-tutoring activity independently. Tutors learn how to encourage their peers with positive reinforcement to look at certain portions of the text where the required evidence is located to support a correct response or to sound out difficult words (Vilardo et al., 2013). Finally, both the tutor and tutee are reinforced for meeting specified activities and expectations are reviewed. Table 1 provides a step-by-step guide for implementing a peer-mediated reading activity. Table 2 provides website links and citations for those wanting additional information and resources on self-regulation and peer mediation.

ClassWide Peer Tutoring. One manualized approach to peer-mediated instruction with students with ADHD is Class-Wide Peer Tutoring (CWPT). This peer-mediated reading program has been found to improve academic outcomes and behaviors during reading instruction (DuPaul et al., 1998; Greenwood et al., 1988, 1993; Raggi & Chronis, 2006). In CWPT, students within a classroom are placed in two separate teams with equally distributed reading abilities. Then all students take a pretest at the beginning of the week on the skills that will be learned that week. Once the pretest is completed, the daily activities start with the teacher teaching and modeling a given skill, such as reading words fluently and accurately. Next, partners work together to practice the skill for a given amount of time. The partner activity includes one student acting as a tutor until a timer chimes, noting that a given amount of time has expired. Then students switch roles, the tutor becomes the tutee and the tutee becomes the tutor, so each student has the opportunity to both lead an activity as well as be the one responding to reading prompts. During this tutoring time, CWPT aims for errorless learning by prompting the tutors to correct the tutee as soon as the tutee provides an incorrect

Table 2. Resources for Instructional Approaches to Enhance Reading Instruction for Students With ADHD.

Topic	Description	Resource
Self-regulation	The National Center on Intensive Interventions website provides guides and additional links on how to teach students to self-monitor	https://intensiveintervention.org/intervention-resources/behavior-strategies-support-intensifying-interventions#self
	The Center on the Developing Child through Harvard University provides information and activities to support student self-regulation	https://developingchild.harvard.edu/science/key-concepts/executive-function/
	These research-to-practice articles discuss how to implement self-regulation to support students in the general education and small group reading instruction, respectively	Korinek and deFur (2016) and Roberts, Solis, and Chance (2019)
Peer mediation	The University of Kansas provides templates and example lesson plans for classwide peer-tutoring	http://www.specialconnections.ku.edu/?q=instruction/classwide_peer_tutoring/teacher_tools
	The IRIS Center at Vanderbilt University has a module on Peer-Assisted Learning Strategies for students in Grades 2–6	https://iris.peabody.vanderbilt.edu/module/pals26/
	The following books provide guidance on implementing peer-mediated instruction in the classroom	Carter and colleagues (2009) and Hughes and Carter (2008)

Note. ADHD = attention-deficit/hyperactivity disorder; IRIS = innovative resources for instructional success.

response. Following an incorrect response, the tutor is expected to model the correct response and then provide multiple opportunities for the tutee to practice the correct response. To promote engagement and reinforcement of desired skills and behaviors, points are awarded for correct responses. After each student has an opportunity to complete the role as a tutor and tutee, the total number of responses accurately completed is counted. For each team (composed of multiple peer partners), the sum of the total responses is recorded. At the end of the week, the team with the most accurate responses (or points) wins. At the end of the week, a posttest is also given to guide future instruction.

Fostering Family–School Collaboration to Support Reading and Behavior Outcomes

Instructional efforts that foster greater communication and collaborations with parents have a long history of success in improving reading and behavioral outcomes for students with and without ADHD (Sheridan et al., 2014; Tamm et al., 2017). Indeed, family engagement in positive behavioral school support systems has been found to improve overall school-wide and individual child performance (Weist et al., 2017). This section describes several home-school approaches that can both improve classroom reading instruction for students with ADHD and promote student behavioral engagement and motivation.

Initially, two research-based approaches to enhance home-school communication are reviewed that are easily embedded into ongoing classroom assignments: Daily report cards (DRCs) and Teachers Involve Parents in Schoolwork (TIPS) assignments. A third more intensive home-school

approach, Conjoint Behavioral Consultation (CBC), is also described and requires several collaborative meetings between teachers, parents, and a facilitator to jointly develop strategies to improve academic and behavioral performance. Enhanced systems of communication that promote teacher and parent relationships and commitment to work together are the core features of each of these approaches (Miller et al., 2014). This section ends with a call for broader, multi-modal home-school collaborative approaches for this population. One such program is briefly described that has successfully integrated many aspects of these approaches for elementary students with ADHD and their families.

DRCs

DRCs are commonly used across general and special education settings for elementary through high school students with ADHD (Barkley, 2013; Pyle & Fabiano, 2017) and have been found to be effective in supporting behaviors as part of a reading instruction program (Tamm et al., 2017). DRCs have been commonly referred to as “behavior report cards,” “home notes,” and “home-school notes,” and are available in a variety of formats. Typically, DRCs are constructed to be similar to the self-monitoring form presented in Figure 1, with a list of child behaviors (or goals), criteria for meeting the goals, a mechanism to monitor the goals, and reinforcement for meeting the goal criteria.

Where DRCs differ from typical self-monitoring forms is the incorporation of a communication component between teachers and family members. The use of DRCs places a greater emphasis on home-school collaboration and has contributed to improved student outcomes (Tamm et al., 2017; Vannest et al., 2010). Vannest and colleagues (2010) found that student outcomes were the best when (a) family

Name: _____		Date: _____	
Goals	Teacher, Caregiver, and Student Created Examples		
Complete All Work	1. Completed work with 80% accuracy 2. Started work quickly 3. Asked for help when needed		
Be Respectful to Teacher and Other Students	1. Raised hand 2. Followed directions 3. Kept hands and feet to self		
Goals	Reading Block 1	Reading Block 2	
1. Completed All Work	Yes or No	Yes or No	
2. Was Respectful to Teacher and Other Students	Yes or No	Yes or No	
Number of Items Answered with a “Yes” = _____			
Teacher Comment: _____			
Student Comment: _____			
Family Member Comment: _____			
Menu of Home Reinforcers Based on Number of Items Answered Yes: 4: Choice of preferred afterschool snack <i>and</i> stay up 10 minutes past bedtime <i>and</i> choice of music in the car on the way to and from school 3: Choice of preferred afterschool snack <i>or</i> choice of music in the car on the way to and from school (student choice) 2: Extra 5 minutes of a movie <i>and</i> write what you will do better tomorrow 0–1: Write what you will do better tomorrow			

Figure 2. Daily report card example.

members were trained to use the DRC, (b) family members and schools worked together to develop a menu of reinforcement options that provided family members with a voice in choosing reinforcers that were to be delivered at home, and (c) teachers gave students positive feedback at school.

Another benefit of DRCs is that they foster two-way, reciprocal communication about important home and school information. In the DRC format example provided in Figure 2, there is a place to include information to families on the child’s behavior during the day and a location that asks for family input. Encouraging such feedback provides family members an opportunity to be more active participants in their child’s education and demonstrates that family feedback is critical to a student’s success.

TIPS Assignments

TIPS assignments differ from traditional homework in that the aim is to foster family engagement in fun, interactive activities related to ongoing class lessons. This empirically validated approach leads to increased family-school collaboration and improved homework and classwork outcomes (Epstein et al., 2009; Walker et al., 2004). Unlike typical homework assignments, where students often work independently to practice a skill, TIPS assignments involve the student and family members in extension activities that

promote conversations and real-life expansions of ongoing classroom learning (Van Voorhis, 2011a, 2011b).

To create TIPS reading assignments, five components need to be present. The first component is a short note to the family that explains the purpose of the assignment and what has already been learned in the class. Second, there is a warm-up activity where the student gets to show and explain to his or her family partner what the student has already learned on the topic. Third, there is a request to re-practice an activity together. Fourth, to provide an opportunity to enhance previously learned content, a new related activity is jointly completed by the student and a family member. The expansion activity encourages interactions through the application of similar content or skills to a real-life situation. Such activities might include brainstorming ideas together, conducting a short survey, building or assembling a structure, developing a graphic organizer to capture key ideas, asking others to give impressions on an issue, or editing work together. Finally, before a family member signs the assignment and sends it back to the teacher, there is a section for a family member to provide feedback to simple yes–no questions such as, “did your child understand the assignment?” or “did you enjoy the activity?” or “did the activity help you to understand what your child is learning in class?” Figure 3 provides an early literacy TIPS example based on work by Parker et al. (2016).

Student Name: _____	Date: _____
Dear family member, At school we are learning about prefixes and suffixes . A prefix is added to the beginning of a word to change its meaning. A suffix is added to the end of a word to change its meaning. I look forward to working on this assignment with you! <div style="text-align: right;">Sincerely,</div> <div style="text-align: right;">_____</div> <div style="text-align: right;">Student name</div>	
Today I am working with _____	
In my own words, I am going to define a prefix and suffix . Place a check box by how well I knew the definition of a prefix and suffix ? <input type="checkbox"/> I got it! <input type="checkbox"/> I needed a little help <input type="checkbox"/> We worked on it together and practiced again in the morning	
Together, let's think of three prefixes : 1. _____ 2. _____ 3. _____	
Can we come up with a word that uses each prefix and put it in a sentence? 1. _____ 2. _____ 3. _____	
Together, let's think of three suffixes : 1. _____ 2. _____ 3. _____	
Can we come up with a word that uses each suffix and put it in a sentence? 1. _____ 2. _____ 3. _____	
Let's draw a picture of our favorite sentence with a prefix or suffix ! <div style="height: 100px; border: 1px solid black; margin-top: 5px;"></div>	
Dear family member, We hope you enjoyed the assignment; please let us know if you have any comments about today's activity: _____	
Family Member Signature: _____ Date: _____	

Figure 3. Teachers Involve Parents in Schoolwork (TIPS) assignment example.

TIPS assignments also work best when (a) they are sent home on a predictable schedule, such as every Monday, and (b) they are explained to students before the assignment goes home. When the assignment is sent home, the family members and student can plan to spend about 20 min on the assignment, depending on the grade-level of the student (Epstein et al., 1995).

CBC

CBC is a research-based problem-solving process to improve family and school collaboration with a long history of success in reducing challenging behaviors, improving academic outcomes, refining teacher instructional practices, and enhancing family-to-school relationships for elementary and middle

school grade students and families with and without ADHD (Power et al., 2012; Sheridan et al., 2018). When implementing CBC, families, teachers, and trained consultants meet jointly to discuss concerns before collaborating on behavioral management strategies to use together at school and at home (Sheridan & Kratochwill, 2008). Consultants act as a facilitative coach who meet with families and teachers during several structured sessions over a 2- to 3-month period. In the early sessions, child-focused strengths and challenges are identified. Discussions focus on targeting key child behaviors and determining how to collect behavioral data. Home and school data are then collected and the data are jointly reviewed. Next, the family and teacher develop a plan that integrates academic and behavioral supports to directly address the identified challenges across school and home and includes an agreed upon

Table 3. Resources for Fostering Family-School Collaboration to Support Development of Student Reading and Behavior Outcomes.

Topic	Description	Resource
Daily report card	The Center for Children and Families at Florida International University provides explicit step-by-step guidance on how to create a daily report card	https://ccf.fiu.edu/_assets/pdfs/how_to_establish_a_school_drc.pdf
Teachers Involve Parents in Schoolwork (TIPS)	This manual describes how to create and implement TIPS assignments in the elementary and middle grades	Epstein et al. (1995)
Conjoint Behavioral Consultation (CBC)	The Colorado Department of Education offer a TIPS early literacy manual with guidance and example assignments	https://www.cde.state.co.us/uip/tips_literacy_k_3_final_manual_for_teachers_cde
Multicomponent family-school partnerships	This book puts forward a detailed explanation of how to implement CBC	Sheridan and Kratochwill (2008)
	This research brief outlines the similar features of CBC and a similar model titled Teachers and Parents as Partners	Angell and colleagues (2016)
	Mapp and Kutter (2013) provide information and guidance on implementing the Dual Capacity-Building Framework for Family-School Partnerships	https://www2.ed.gov/documents/family-community/partners-education.pdf
	Weist and colleagues' (2017) ebook provides information and strategies to promote school-family engagement in school-wide models	https://www.pbis.org/Common/Cms/files/pbisresources/Family%20Engagement%20in%20PBIS.pdf
	The following three texts further support family-school collaborations	Lines et al. (2011), Epstein (2011), and Constantino (2016)

monitoring system that is used to evaluate the child's progress. Throughout the CBC process, participants engage in structured problem-solving discussions about how to best address child behavior and tailor home-school communication and services to support targeted instructional and behavioral goals at school and home.

Multicomponent Family-School Programs

Multicomponent family-school programs incorporating all three of the previously described approaches have been developed to help families and teachers jointly learn how (a) characteristics of ADHD are related to child and adult behavior, coping, and relationships; (b) child-focused behavior management, self-regulation, and problem-solving can be integrated into daily routines; (c) to increase communication about academic and behavioral expectations; and (d) to plan, monitor, and evaluate the effectiveness of coordinated home-school interventions. One example of such an intervention for elementary students with ADHD is the Family-School Success (FSS) program (Mautone et al., 2012; Power et al., 2012). FSS counselors work with a family for a total of 12 sessions, most of which are held with both school professionals and the family, but some with just the family (including children) or just with school professionals. Within the FSS program, a DRC and an interactive homework intervention is employed and the school-based sessions follow a CBC framework. The FSS program has led to greater family involvement, enhanced home-to-school relationships, improved homework completion and performance, and a significant reduction in ineffective parenting behaviors (Mautone et al., 2012;

Power et al., 2012). Another evidence-based multicomponent family-school intervention, called the Collaborative Life Skills program, with many similar home-school components is described in Pfiffner et al. (2013). Table 3 provides website links and citations for those wanting additional information and resources to support family-school collaborations, as discussed in this section.

Conclusion

There is an ongoing need to find effective means to improve both reading and behavioral outcomes for students with ADHD. This article presented information on how to use self-regulation and peer mediation to enhance classroom reading instruction for students with ADHD. Furthermore, several approaches to family-school collaboration were presented to improve the success of students with ADHD by fostering greater communication and complimentary learning across home and school settings. Such efforts, when linked to an integrated school-wide multitiered system of supports, may achieve the best possible outcomes for these as well as all students (Harvard Family Research Project, 2010; Weist et al., 2017).

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References

- Angell, S. R., Bass, H. P., Meisinger, R. E., Marcus, M. J., & Sheridan, S. M. (2016). *Achieving academic success for your student through family school partnerships: A TAPP research brief*. Nebraska Center for Research on Children, Youth, Families and Schools.
- Barkley, R. A. (2002). Major life activity and health outcomes associated with attention-deficit/hyperactivity disorder. *The Journal of Clinical Psychiatry*, 63(Suppl. 12), 10–15.
- Barkley, R. A. (2013). *Taking charge of ADHD: The complete authoritative guide for parents* (3rd ed.). Guilford Press.
- Briesch, A. M., & Chafouleas, S. M. (2009). Review and analysis of literature on self-management interventions to promote appropriate classroom behaviors (1988–2008). *School Psychology Quarterly*, 24, 106–118. <https://doi.org/10.1037/a0016159>
- Bruhn, A., McDaniel, S., & Kreigh, C. (2015). Self-monitoring interventions for students with behavior problems: A systematic review of current research. *Behavioral Disorders*, 40, 102–121. <https://doi.org/10.17988/BD-13-45.1>
- Carter, E. W., Cushing, L. S., & Kennedy, C. H. (2009). *Peer support strategies: Improving all students' social lives and learning*. Paul H. Brookes.
- Constantino, S. M. (2016). *Engage every family: Five simple principles*. Corwin Press.
- Cordier, R., Vilaysack, B., Doma, K., Wilkes-Gillan, S., & Speyer, R. (2018). Peer inclusion in interventions for children with ADHD: A systematic review and meta-analysis. *BioMed Research International*, 2018, Article 7693479. <https://doi.org/10.1155/2018/7693479>
- Cushing, L. S., & Kennedy, C. H. (1997). Academic effects of providing peer support in general education classrooms on students without disabilities. *Journal of Applied Behavior Analysis*, 30, 139–151.
- DuPaul, G. J., Eckert, T. L., & Vilardo, B. A. (2012). The effects of school-based interventions for attention deficit hyperactivity disorder: A meta-analysis 1996–2010. *School Psychology Review*, 41, 387–412. <https://search.proquest.com/docview/1319240445?accountid=14608>
- DuPaul, G. J., Ervin, R. A., Hook, C. L., & McGoey, K. E. (1998). Peer tutoring for children with attention deficit hyperactivity disorder: Effects on classroom behavior and academic performance. *Journal of Applied Behavior Analysis*, 31, 579–592.
- Epstein, J. L. (2011). *School, family, and community partnerships: Preparing educators and improving schools* (2nd ed.). Westview.
- Epstein, J. L., Salinas, K. C., & Jackson, V. E. (1995). *Manual for teachers and prototype activities: Teachers involve parents in schoolwork (TIPS) language arts, science/health, and math interactive homework in the middle grades*. Center on School, Family, and Community Partnerships, Johns Hopkins University.
- Epstein, J. L., Sanders, M. G., Simon, B. S., Jansorn, N. R., & Van Voorhis, F. L. (2009). *School, family, and community partnerships: Your handbook for action* (3rd ed.). Corwin Press.
- Farland, J., Hussar, B., de Brey, C., Snyder, T., Wang, X., Wilkinson-Flicker, S., . . . Hinz, S. (2017). *The condition of education 2017* (NCES 2017144). National Center for Education Statistics. <https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2017144>
- Greenwood, C. R., Delquadri, J., & Carta, J. J. (1988). *Classwide peer tutoring (CWPT)*. Educational Achievement Systems.
- Greenwood, C. R., Terry, B., Utley, C. A., Montagna, D., & Walker, D. (1993). Achievement placement and services: Middle school benefits of Classwide peer tutoring used at the elementary school. *School Psychology Review*, 22, 497–516.
- Harlacher, J. E., Roberts, N. E., & Merrell, K. W. (2006). Classwide interventions for students with ADHD: A summary of teacher options beneficial for the whole class. *TEACHING Exceptional Children*, 39, 6–13. <https://doi.org/10.1177/004005990603900202>
- Harris, K. R., Friedlander, B. D., Saddler, B., Frizzelle, R., & Graham, S. (2005). Self-monitoring of attention versus self-monitoring of academic performance: Effects among students with ADHD in the general education classroom. *The Journal of Special Education*, 39, 145–157. <https://doi.org/10.1177/00224669050390030201>
- Harvard Family Research Project. (2010). *Family engagement as a systemic, sustained, and integrated strategy to promote student achievement* (Project report). Harvard Graduate School of Education.
- Hughes, C., & Carter, E. W. (2008). *Peer buddy programs for successful secondary school inclusion*. Paul H. Brookes.
- Johnson, J. W., Reid, R., & Mason, L. H. (2012). Improving the reading recall of high school students with ADHD. *Remedial and Special Education*, 33, 258–268. <https://doi.org/10.1177/0741932511403502>
- Korinek, L., & deFur, S. H. (2016). Supporting student self-regulation to access the general education curriculum. *TEACHING Exceptional Children*, 48, 232–242. <https://doi.org/10.1177/0040059915626134>
- Kourea, L., Cartledge, G., & Musti-Rao, S. (2007). Improving the reading skills of urban elementary students through total class peer tutoring. *Remedial and Special Education*, 28, 95–107. <https://doi.org/10.1177/07419325070280020801>
- Lane, K. L., Menzies, H., Bruhn, A., & Crnabori, M. (2011). *Managing challenging behaviors in schools: Research-based strategies that work*. Guilford Press.
- Lin, Y. C., Morgan, P. L., Hillemeier, M., Cook, M., Maczuga, S., & Farkas, G. (2013). Reading, mathematics, and behavioral difficulties interrelate: Evidence from a cross-lagged panel design and population-based sample of US upper elementary students. *Behavioral Disorders*, 38, 212–227. <https://doi.org/10.1177/019874291303800404>
- Lines, C., Miller, G. E., & Arthur-Stanley, A. (2011). *School-based practice in action series. The power of family-school partnering (FSP): A practical guide for school mental health professionals and educators*. Routledge; Taylor & Francis.
- Mapp, K. L., & Kuttner, P. J. (2013). *Partners in education: A dual capacity-building framework for family-school partnerships*. SEDL & U.S. Department of Education. <http://www2.ed.gov/documents/family-community/partners-education.pdf>
- Mautone, J. A., Marshall, S. A., Sharman, J., Eiraldi, R. B., Jawad, A. F., & Power, T. J. (2012). Development of a family-school

- intervention for young children with attention deficit hyperactivity disorder. *School Psychology Review*, 41, 447–466.
- McDougall, D., Heine, R. C., Wiley, L. A., Sheehy, M. D., Sakanashi, K. K., Cook, B. G., & Cook, L. (2017). Meta-analysis of behavioral self-management techniques used by students with disabilities in inclusive settings. *Behavioral Interventions*, 32, 399–417. <https://doi.org/10.1002/bin.1491>
- Menzies, H. M., & Lane, K. L. (2011). Using self-regulation strategies and functional assessment-based interventions to provide academic and behavioral support to students at risk within three-tiered models of prevention. *Preventing School Failure: Alternative Education for Children and Youth*, 55, 181–191. doi: 10.1080/1045988X.2010.520358
- Miller, G. E., Lines, C., & Fleming, M. (2014). Family-school collaboration for multi-tiered service delivery. In A. Thomas & P. Harrison (Eds.), *Best practices in school psychology: System-level services* (pp. 491–504). National Association of School Psychologists.
- Parker, C. K., Castillo, M. D., Firme, K. K., Epstein, J. L., & Greenfeld, M. (2016). *Teachers involve parents in schoolwork (TIPS) interactive homework-literacy K-3*. Center on School, Family, and Community Partnerships, Johns Hopkins University.
- Pfiffner, L. J., Villodas, M., Kaiser, N., Rooney, M., & McBurnett, K. (2013). Educational outcomes of a collaborative school-home behavioral intervention for ADHD. *School Psychology Quarterly*, 28, 25–36. <https://doi.org/10.1037/spq0000016>
- Plumer, P. J., & Stoner, G. (2005). The relative effects of classwide peer tutoring and peer coaching on the positive social behaviors of children with ADHD. *Journal of Attention Disorders*, 9, 290–300. <https://doi.org/10.1177/1087054705280796>
- Power, T. J., Mautone, J. A., Soffer, S. L., Clarke, A. T., Marshall, S. A., Sharman, J., . . . Jawad, A. F. (2012). A family-school intervention for children with ADHD: Results of a randomized clinical trial. *Journal of Consulting and Clinical Psychology*, 80, 611–623. <https://doi.org/10.1037/a0028188>
- Pyle, K., & Fabiano, G. A. (2017). Daily report card intervention and attention deficit hyperactivity disorder: A meta-analysis of single-case studies. *Exceptional Children*, 83, 378–395. <https://doi.org/10.1177/0014402917706370>
- Raggi, V. L., & Chronis, A. M. (2006). Interventions to address the academic impairment of children and adolescents with ADHD. *Clinical Child and Family Psychology Review*, 9, 85–111. <https://doi.org/10.1007/s10567-006-0006-0>
- Reid, R., Trout, A. L., & Schartz, M. (2005). Self-regulation interventions for children with attention deficit/hyperactivity disorder. *Exceptional Children*, 71, 361–377.
- Roberts, G. J., Mize, M., Reutebuch, C. K., Falcomata, T., Capin, P., & Steelman, B. L. (2019). Effects of a self-management with peer training intervention on academic engagement for high school students with autism spectrum disorder. *Journal of Behavioral Education*, 28, 456–478. <https://doi.org/10.1007/s10864-018-09317-2>
- Roberts, G. J., Solis, M., & Chance, B. (2019). Embedding self-regulation into reading interventions to support reading and behavior outcomes. *TEACHING Exceptional Children*, 52, 78–86. <https://doi.org/10.1177/0040059919874306>
- Roberts, G. J., Vaughn, S., Roberts, G., & Miciak, J. (2019). Problem behaviors and response to reading intervention for upper elementary students with reading difficulties. *Remedial and Special Education*. Advanced online publication. <https://doi.org/10.1177/0741932519865263>
- Robinson, P. W., Newby, T. J., & Ganzell, S. L. (1981). A token system for a class of underachieving hyperactive children. *Journal of Applied Behavior Analysis*, 14, 307–315.
- Sheridan, S. M., Clarke, B. L., & Christenson, S. L. (2014). Best practices in promoting family engagement in education. In A. Thomas & P. Harrison (Eds.), *Best practices in school psychology: System-level services* (pp. 439–453). National Association of School Psychologists.
- Sheridan, S. M., & Kratochwill, T. R. (2008). *Conjoint behavioral consultation: Promoting family-school connections and interventions*. Springer.
- Sheridan, S. M., Witte, A. L., Kunz, G. M., Wheeler, L. A., Angell, S. R., & Lester, H. F. (2018). Rural teacher practices and partnerships to address behavioral challenges: The efficacy and mechanisms of conjoint behavioral consultation. *The Elementary School Journal*, 119, 99–121. <https://doi.org/10.1086/698694>
- Spira, E. G., Bracken, S. S., & Fischel, J. E. (2005). Predicting improvement after first grade reading difficulties: The effects of oral language, emergent literacy, and behavior skills. *Developmental Psychology*, 41, 225–234.
- Tamm, L., Denton, C. A., Epstein, J. N., Schatschneider, C., Taylor, H., Arnold, L. E., . . . Vaughn, A. (2017). Comparing treatments for children with ADHD and word reading difficulties: A randomized clinical trial. *Journal of Consulting and Clinical Psychology*, 85, 434–446. <https://doi.org/10.1037/ccp0000170>
- Vannest, K. J., Davis, J. L., Davis, C. R., Mason, B. A., & Burke, M. D. (2010). Effective intervention for behavior with a daily behavior report card: A meta-analysis. *School Psychology Review*, 39, 654–672. <https://doi.org/10.1177/1087054717734646>
- Van Voorhis, F. L. (2011a). Costs and benefits of family involvement in homework. *Journal of Advanced Academics*, 22, 220–249. <https://doi.org/10.1177/1932202X1102200203>
- Van Voorhis, F. L. (2011b). Engaging families in student homework: Action steps for educators. In H. Kreider & H. Westmoreland (Eds.), *Promising practices for family engagement in out-of-school time* (pp. 71–84). Information Age Publishing.
- Vilardo, B. A., DuPaul, G. J., Kern, L., & Hojnoski, R. L. (2013). Cross-age peer coaching: Enhancing the peer interactions of children exhibiting symptoms of ADHD. *Child & Family Behavior Therapy*, 35, 63–81. <https://doi.org/10.1080/07317107.2013.761043>
- Walker, J. M., Hoover-Dempsey, K. V., Whetsel, D. R., & Green, C. L. (2004). *Parental involvement in homework: A review of current research and its implications for teachers, after school program, staff, and parent leaders*. Harvard Family Research Project, Harvard Graduate School of Education.
- Watts, G. W., Bryant, D. P., & Carroll, M. L. (2019). Students with emotional-behavioral disorders as cross-age tutors: A synthesis of the literature. *Behavioral Disorders*, 44, 131–147. <https://doi.org/10.1177/0198742918771914>
- Weist, M. D., Garbacz, A., Lane, K. L., & Kincaid, D. (2017). *Aligning and integrating family engagement in Positive Behavioral Interventions and Supports (PBIS): Concepts and strategies for families and schools in key contexts*. University of Oregon Press.
- Zimmerman, B. J. (2002). Becoming a self-regulated learner: An overview. *Theory Into Practice*, 41, 64–70. https://doi.org/10.1207/s15430421tip4102_2